STATUS OF THE OIL AND GAS SECTOR

Iraq relies on oil and gas production and export to generate the funds necessary "to achieve the politically vital goal of ensuring the stable provision and expansion of basic services."64 About 95% of Iraq's national income is derived from oil exports. Figure 13 shows the critical oil and gas infrastructure across Iraq, including the country's 4,350-mile pipeline system.

Oil Production, Exports, and Refining

GRD estimates that oil production capacity reached 2.6 million BPD this quarter.⁶⁷ The actual level of production and exports dipped slightly, primarily because of a temporary shutdown caused by work at the Al Basrah Oil Terminal (ABOT) in January 2007.68 Table 2-10 presents reconstruction project metrics against pre-war levels and U.S. and Iraqi end-state goals. As Table 2-10 reveals, Iraq continues to miss oil and gas production and export targets.

Figure 2-13 **GAS AND OIL INFRASTRUCTURE BY GOVERNORATE** Source: CIA Country Profile Map



CURRENT OIL AND GAS PROJECT BENEFITS VS. PRE-WAR LEVEL AND GOAL

OUTCOMES METRICS	Pre-war Level (2003)	Quarter Average	U.S. GOALS	Iraqi Goals
Oil Production Capacity (million BPD)	2.80	2.6*	3.0	2.8
Oil Production (actual) (million BPD)	2.58	1.95	Not Available	2.8
Export Levels (million BPD)	Not Available	1.44	2.2 (capacity)	1.7
Natural Gas Production Capacity	Not Available	760*	800	Not Available
LPG Production Capacity	Not Available	1,900*	3,000	Not Available

^{*}Data for these figures is taken from a GRD response to SIGIR, April 6, 2007, p.9.

Sources: Pre-war numbers—DoE Country Analysis Brief, meeting with DoE officials on May 31, 2006. Quarter Average—IRMO Monthly Import, Export, and Production Report, April 12, 2007; GRD, response to SIGIR, April 6, 2007, p. 1. (Natural Gas Production Capacity and LPG Production Capacity) "Sector Consolidated Results Update Meeting," September 10, 2006, p. 3 (natural gas production capacity and LPG production capacity). U.S. end-state goals—GRD-PCO, "Iraq Reconstruction Report," October 5, 2006, p. 3 (production capacity); DoS, response to SIGIR, July 24, 2006 (export capacity); Iraqi goals—meetings and discussions with DoS officials for April 2006 Quarterly Report; DoS, DoS response to SIGIR, April 19, 2007 (Iraqi export target).

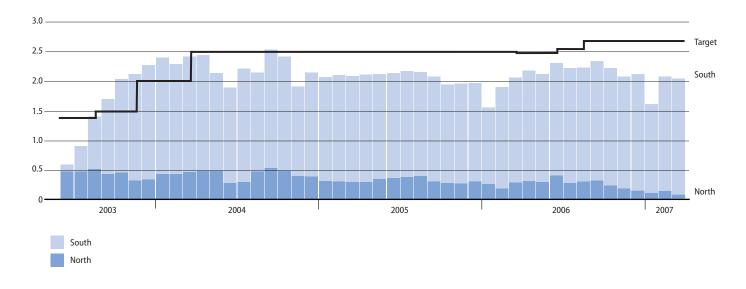
TABLE 2-10

Figure 2-14

CRUDE OIL PRODUCTION BY REGION

Millions of Barrels per Day, Monthly Average

Source: IRMO, Monthly Import, Production, and Export (March 2007)



PRODUCTION

This quarter, crude oil production averaged 1.95 million BPD,⁶⁹ a drop from last quarter's output of 2.17 million BDP but an increase over output from the spring 2006 quarter, which was 1.84 million BPD. As Figure 2-14 reveals, Iraq has missed its quarterly production target every quarter since 2004.

EXPORTS

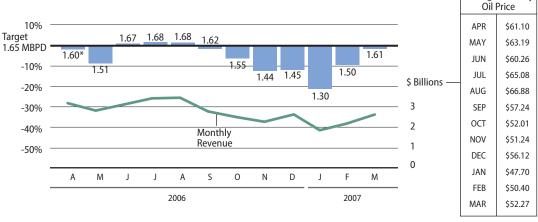
This quarter, exports averaged 1.44 million BPD, an increase from 2006 when exports for the spring quarter were 1.30 million BPD and 2005 when exports were 1.40 million BPD.⁷⁰ See Figure 2-15. U.S. reconstruction oil experts attribute the oil and gas sector's improved export performance to the refurbishment of gas-oil separation plants (GOSPs), intermittent operations of the Iraq-Turkey Pipeline (ITP), and rehabilitation work on the loading arms at the southern offshore loading berths ABOT.⁷¹

The ITP links the Kirkuk oil fields with the Turkish port city of Ceyhan and is the major export route for crude oil from the northern production fields. Only 2% of oil exports went through Ceyhan this quarter, and IRMO has not reported any exports through the ITP since January because attacks have shut down the pipeline.⁷² In southern Iraq, another major network of pipeline routes links the Rumaila oil production fields with ABOT.

Iraq relies heavily on ABOT as an export node, particularly when the northern pipeline system is down. This quarter, SIGIR Inspections reported on ABOT (PA-06-080), finding that refurbishment and repair work on the loading arms met the original objectives; however, because the entire Iraqi oil sector infrastructure is in need of improvement, successful work at ABOT will not appreciably increase export rates. SIGIR noted last quarter that meters were installed at ABOT. The process of

Average Monthly

Figure 2-15 **MONTHLY CRUDE OIL EXPORT AND REVENUE RAISED** Millions of Barrels per Day (MBPDs), \$ Billions Sources: DoS, Iraq Weekly Status (4/5/2006 - 3/28/2007), IMF SBA (Iraqi Target)



* Actual Oil Production (MBPD)

installing the meters led to a brief shutdown of the platform and contributed to lower crude oil output in January.

REFINING

Iraq transports crude oil produced in the northern fields near Kirkuk to Baiji for refining. The Baiji-Kirkuk Pipeline is the major route by which crude oil reaches the refineries. This network of four major pipelines is frequently attacked.

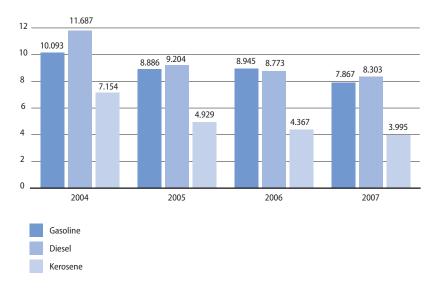
In 2006, Iraq's refineries did not provide enough domestic capacity to supply the population with refined fuels for heating homes, fueling automobiles, and powering factories. Iraq's inability to meet domestic demand forced the GOI to import kerosene, gasoline, diesel, and liquefied petroleum gas (LPG). Figure 2-16 shows the status of Iraq's refined fuel production compared to performance over the last three years.

According to IRMO, Iraq stopped importing refined fuels on December 31, 2006, and plans to depend on refineries and private importers during 2007 with limited government importing.73

According to the IMF, domestic fuel prices will continue to increase in 2007. This quarter, NEA-I reported that two increases in fuel prices were implemented in January and March.74 This increase follows the fuel liberalization policy enacted in 2006, which supports the elimination of fuel subsidies for gasoline and other refined fuel products.75 The IMF also notes that an implicit budget subsidy will remain on domestically produced fuel products, like gas and diesel.76

While most of Iraq's refined product moves by pipeline from refineries and Khor al-Zubair to depots, Iraq also depends on Turkey for refined fuel imports, a relationship that is complicated by Iraq's unpaid debt to Turkey for

SPRING FUEL REFINERY PRODUCTION 2004 - 2007 Millions of Liters Source: IRMO, Monthly Import, Export, and Production (April 2007)



Note: For quarter ending March 31, 2007.

refined fuel imports. Beyond procuring refined fuel, Iraq also struggles with transporting and storing refined products once they enter the Iraqi market. Transporting the fuel becomes cumbersome if pipelines are interdicted, particularly because the product is then moved by truck across insecure parts of the country. Storing refined fuels is also a concern for Iraq. IRMO reports that security issues at particular depots and refineries can lead to shipment disruptions, turning typically sufficient storage into a problem. Last quarter, SIGIR also reported that Iraq lacked sufficient storage capacity at the Baiji refinery.⁷⁷

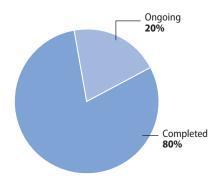
Hydrocarbon Law

The first in a series of hydrocarbon laws will soon be considered by the Council of Representatives (CoR).78 The legislation comprises a series of four separate laws: a framework law, a revenue-sharing law, creation of a national oil company, and a law that outlines a regulatory role for the Ministry of Oil.79 As authorities debate these "contentious issues,"80 most international oil companies are awaiting the outcome of the debate before moving ahead with investment deals.

Sector Development Results

Although U.S.-funded projects have helped increase crude oil production capacity and exports, a number of issues continue to significantly challenge sustained development in this sector, including the deteriorating security situation, inadequate maintenance of antiquated infrastructure, continued corruption, and a cumbersome budget and procurement execution process at the Ministry of Oil.

Figure 2-18 STATUS OF IRRF 2 PROJECTS - OIL AND GAS Sources: IRMS, IRMO Rollup (3/30/2007); USAID, Activities Report (4/10/2007)



Project Type	Not Started	Ongoing	Completed	Total
Southern Region Projects		5	15	20
Water Injection Pump Stations			13	13
Northern Region Projects		1	10	11
Dedicated Power		1	7	8
LPG/LNG Plant Refurbishment		5		5
General Projects			2	2
Restore Gas Oil Separation Plants			1	1
Total	0	12	48	60

As of March 27, 2007, \$1.58 billion of the sector's original allocation of the IRRF 2 (\$1.72 billion) had been obligated, and \$1.37 billion had been expended (80%).81 Figure 2-17 shows the status of sector funds.

U.S. reconstruction officials estimate that all U.S. construction projects in this sector will be completed by May 2007.82 For a summary of U.S.-funded construction projects to date, see Figure 2-18.



Loading arms at Al Basrah Oil Terminal.

